7 Academic & Professional Service

7.1 Academic Service

7.1.1 Dartmouth College

College-Wide Service

| Dates | Role | Scope |
|------------------------|--------|---|
| May 2016 - Aug 2017 | Member | Irving Institute for Energy & Society Faculty Forum Organizer |
| May 2016-Apr 2017 | Member | Dartmouth Sustainability Task Force |

Thayer School of Engineering. Dartmouth College

| Dates | Role | Scope |
|---------------------|--------|---------------------------------|
| July 2020 - Present | Member | MEM Program Committee |
| May 2016 - Present | Member | Cook Center Steering Committee |
| Mar 2016 - Present | Member | VIT Speaker Selection Committee |
| Sept 2016 - Present | Member | MEM Review Board |

7.1.2 Masdar Institute of Science & Technology

Institute-Wide Service

| Dates | Role | Committee |
|---------------------|-----------------|--|
| Sep 2013 - Present | Member | Seminar Series Committee |
| Dec 2012 | Member | Masdar Institute Recruiting Team |
| Jan 2012 - Dec 2012 | Member | Research Council |
| Nov 2011 - Present | University Rep. | CESUN - Council of Engineering Systems Universities |

Engineering Systems & Management Department

| Dates | Role | Scope |
|---------------------|-------------|--|
| Sep 2013 - Sep 2014 | Member | Student Admissions & Advancement Committee |
| Feb 2013 - Aug 2013 | Chairperson | Admissions Committee |
| Sep 2012 - Aug 2013 | Member | Strategic Planning Committee |
| Oct 2012 | Author | Proposal on Student Allocation Process Committee |

| Sep 2010 - Jan 2013 | Member | Admissions Committee |
|---------------------|--------|--------------------------|
| Sep 2010 - Jan 2013 | Member | Faculty Search Committee |

Sustainable Critical Infrastructure Program. Masdar Institute of Science & Technology.

| Dates | Role | Scope | |
|---------------------|--------|--------------------------|--|
| Jan 2013 - Aug 2013 | Member | Faculty Search Committee | |

7.1.3 University of Cambridge

Institute for Manufacturing. Engineering Department.

| Dates | Role | Scope |
|---------------------|-----------------|---|
| Oct 2003 - Dec 2006 | Program Manager | Rockwell Automation Funded Program |
| Jan 2003 - Dec 2006 | Institute Rep. | EU I*PROMS Research Network of Excellence |

7.1.4 Connecticut Region # 19

Connecticut Region #19

| Dates | Role | Scope |
|---------------------|--------------|------------------------------|
| Oct 1995 - May 1996 | Student Rep. | Board of Education |
| Oct 1994 - May 1996 | Student Rep. | Strategic Planning Committee |

7.2 Professional Service

7.2.1 Government & Industrial Committees

| Dates | Role | Committee Name |
|-----------|---------|--|
| 2015 | Member | National Infrastructure Advisory Council (NIAC)'s Water Resilience Study Group |
| 2008-2010 | Founder | European Industrial Gases Association Ad-Hoc Group I.17 IPPC BREFS |
| 2008-2010 | Member | European Commission IPPC Best Available Technique Reference Document Workgroup on Mineral Oil and Gas Refineries |
| 2008-2010 | Member | European Commission IPPC Best Available Technique Reference Document Workgroup on Large Combustion Plants |
| 2008-2010 | Member | European Commission IPPC Best Available Technique Reference Document Workgroup on Large Volume In- organic Chemicals |

7.2.2 Professional Society Committees

| Dates | Role | Committee Name |
|---------------------|--------------------------|--|
| Oct 2020 - Present | Chair | IEEE Smart Cities Technical Research & Development |
| | | Committee |
| Sep 2017 - Present | Chair | IEEE Smart Cities Technical Activities Committee |
| Feb 2015 - Present | Co-Chairperson | IEEE SMC Technical Committee on Intelligent Industrial Systems |
| Jun 2019 - Present | Chair | IEEE PES - SBLC Architecture Committee |
| Jun 2018 - Oct 2020 | Chair | Council of Engineering Systems Universities |
| May 2020 - Present | Member | New York Academy of Science Infrastructure Architec- |
| ,, | | ture Framework Subject Matter Expert Committee |
| Sep 2017 - Present | Member | IEEE PES - SBLC Taskforce on State of Industry Meeting |
| Sep 2017 - Present | Member | IEEE PES - SBLC P825 Standards Committee on Trans- |
| 0.00 | | active Energy |
| Jun 2016 - Present | Member | IEEE CSS Technical Committee on Smart Grid |
| Apr 2015 - Present | Member | IEEE Smart Cities Initiative Steering Committee |
| Apr 2015 - Present | Member | IEEE CSS Technical Committee on Smart Cities |
| Jan 2014 - Present | Member | IEEE Industrial Electronics Society Technical Commit- |
| | | tee on Industrial Agents |
| Jan 2014 - Present | Member | IEEE Systems, Man & Cybernetics Technical Committee |
| | | on Distributed Intelligent Systems |
| Oct 2013 - Present | Member | ASME DSCD Technical Committee on Energy Systems |
| Jun 2018 - May 2019 | Vice-Chair | IEEE PES - SBLC Architecture Committee |
| Sep 2017 - Aug 2018 | Member | IEEE Smart Grid Electric Vehicles White Paper Working |
| | | Group |
| Jun 2016 - Jun 2018 | Chair-elect & | Council of Engineering Systems Universities |
| | Treasurer | |
| Jun 2013 - Jun 2016 | Chairperson | IEEE CSS Smart Grid Technical Subcommittee on Re- |
| | | newable Energy |
| Jun 2014 - Jun 2016 | Secretary & Treasurer | Council of Engineering Systems Universities |
| Jun 2013 - Jun 2016 | Member | Executive Committee on Axiomatic Design |
| Oct 2013 - Aug 2015 | Member | ASME DSCD Technical Committee on Automotive & |
| . | | Transportation Systems |
| Oct 2013 - Aug 2015 | Member | ASME DSCD Technical Committee on Mechatronics |
| Jun 2013 - May 2015 | Member | ASME WEP Subcommittee on Use of Fresh and Non- |
| | | Fresh Water Resources |
| Jun 2013 - May 2015 | Member | ASME WEP Water Efficiency Guidelines for Power and |
| | * | Other Industrial Facilities |
| Dec 2010 - Jun 2013 | Member | IEEE Control Systems Society Technical Committee on |
| - | | Smart Grids |
| Sep 2010 - Nov 2011 | Member | MIT Future of the Electricity Grid Study |

7.2.3 Editorships

| Dates | Role | Committee Name |
|-------------|-----------------------------|--|
| 2014 - 2015 | Editorial Advisory Board | Intelligent Industrial Systems (Springer) |
| 2013 - 2014 | Associate Editor | Journal of Industrial Engineering & Management (OMICS Group) |

7.2.4 Book Review

| 2014 | Industrial Agents: Emerging Applications of Software Agents in Industry |
|------|---|
| | |

7.2.5 Funding Review Panel

| 2020 | King Fahd University of Petroleum & Mining Energy Review (Saudia Arabia) |
|-------------|---|
| 2020 | Monash University Transactive Energy Platform Review (Australia) |
| 2019 | University of Texas San Antonio Transdisciplinary Teams Smart Cities Pro- |
| | gram |
| 2018 | Canada Foundation for Innovation |
| 2018 - 2019 | Nazarbayev University Research Review (Kazakstan) |
| 2018 | National Science Founcation (USA): Smart and Connected Communities |
| 2017 | National Science Foundation (USA): Humans, Disasters and the Built Environment (HDBE) |
| 0045 | |
| 2017 | National Science Foundation (USA): Critical Resilient Interdependent Infras- |
| | truture Systems & Processes (CRISP) |
| 2015 | National Science Foundation (USA): Partnership for International Research |
| ω. | & Education (PIRE) program |

7.2.6 Journal Review

| | 100000000000000000000000000000000000000 |
|----------------|---|
| 2019 - Present | Journal of Cleaner Production |
| 2019 - Present | IEEE Open Access Journal of Power and Technology |
| 2019 - Present | IEEE Transactions on Samrt Grid |
| 2019 - Present | Energy Strategy Reviews |
| 2018 - Present | Sustainable Cities & Societies |
| 2018 - Present | Applied Thermal Energy |
| 2018 - Present | Computers in Industry |
| 2018 - Present | IEEE Transactions on Power Systems |
| 2017 - Present | Transport Policy |
| 2017 - Present | International Journal of Critical Infrastructure Protection |
| 2017 - Present | Renewable Energy |
| 2017 - Present | Renewable & Sustainable Energy Reviews |
| 2017 - Present | Energies |
| 2016 - Present | Applied Sciences |
| 2016 - Present | Applied Energy |
| 2015 - Present | Information Sciences |
| 4 | |

| 2014 - Present | IEEE Transactions on Industrial Informatics |
|----------------|--|
| 2014 - Present | IEEE Transactions on Industrial Electronics |
| 2014 - Present | IEEE Transactions on Systems, Man & Cybernetics: Systems |
| 2014 - Present | IEEE Transactions on Intelligent Transportation Systems |
| 2014 - Present | IEEE Transactions on Neural Networks and Learning Systems |
| 2014 - Present | International Journal of Electrical Power and Energy Systems |
| 2014 - Present | ISA Transactions |
| 2014 - Present | Journal of Renewable and Sustainable Energy |
| 2014 - Present | Journal of Manufacturing Systems |
| 2014 - Present | Water & Environment Journal |
| 2014 - Present | Utilities Policy |
| 2013 - Present | IEEE Systems Journal |
| 2012 | International Journal of Sustainable Built Environment |
| 2010 | Journal of Mechanical Design |

7.2.7 Conference Review

| | 2017 - Present | Holomas |
|---|----------------|--|
| | 2017 - Present | IEEE Conference on Decision and Control (CDC) |
| , | 2017 - Present | IEEE International Conference on Cybernetics (CYBCONF) |
| | 2015 - Present | IEEE IEEE International Conference on Industrial Informatics (INDIN) |
| | 2015 - Present | IEEE Emerging Technologies & Factory Automation (ETFA) |
| | 2014 - Present | IEEE International Smart Cities Conference |
| | 2014 - Present | Annual INCOSE International Symposium |
| | 2014 - Present | IEEE International Conference on Industrial Electronics (IECON) |
| | 2014 - Present | IEEE International Symposium on Industrial Electronics (ISIE) |
| | 2014 - Present | IEEE Systems, Man, & Cybernetics Conference (SMC) |
| | 2014 - Present | IEEE International Workshop on Intelligent Energy Systems (IWIES) |
| | 2014 - Present | ASME Conference on Engineering Systems Design and Analysis |
| | 2013 - Present | IEEE American Control Conference (ACC) |
| | 2013 - Present | IEEE PES Innovative Smart Grid Technologies Conference (ISGT Europe) |
| | 2013 - Present | International Conference on Axiomatic Design |
| | 2013 - Present | Virtual Control Conference |
| | 2013 - Present | IEEE GCC Conference |
| | 2012 - Present | IEEE PES Innovative Smart Grid Technologies Conference (North America) |
| | | |

7.2.8 Conference Session Organization

| Role | Scope | |
|---------------------|--|--|
| Spec. Session Chair | 2020 IEEE Systems, Man, & Cybernetics Conference | |
| Inv. Session Chair | 2019 American Control Conference | |
| Spec. Session Chair | 2017 IEEE Systems, Man, & Cybernetics Conference | |
| Inv. Session Chair | 2016 American Control Conference | |
| Track Chair | 2015 IEEE Systems, Man, & Cybernetics Conference | |
| Track Chair | 2015 IEEE Smart Cities Conference | |
| Spec. Session Chair | 2015 IEEE Smart Cities Conference | |

| Inv. Session Chair | 2015 American Control Conference |
|--------------------|----------------------------------|
| Inv. Session Chair | 2014 American Control Conference |

7.2.9 Conference Organization

| Role | Scope | | |
|---|---|--|--|
| Inv. Panel Chair | 2020 IEEE International Smart Cities Virtual Conference | | |
| Prog. Committee | 2020 IEEE International Smart Cities Virtual Conference | | |
| Prog. Committee | 2019 IEEE Societal Automation Conference | | |
| Prog. Committee | 2019 Holomas | | |
| Prog. Commitee | 2018 IEEE ICPS | | |
| Conference Chair | 2017 CESUN Annual Meeting | | |
| Steering Comm. | 2015 IEEE Conference on Smart Cities | | |
| Prog. Committee | 2018 IEEE International Conference on Industrial Cyber-Physical Systems | | |
| Prog. Committee | 2015 International Conference on Axiomatic Design | | |
| Prog. Committee | 2015 IEEE Emerging Technologies & Factory Automation | | |
| Prog. Committee | 2015 25th Annual INCOSE International Symposium | | |
| Prog. Committee 2014 24th Annual INCOSE International Symposium | | | |
| Prog. Committee 2014 International Conference on Axiomatic Design | | | |
| Prog. Committee 2014 IEEE Systems Man & Cybernetics Conference. San Diego, C. | | | |
| Prog. Committee | 2014 IEEE Systems Man & Cybernetics International Workshop on Intelligent | | |
| | Energy Systems. San Diego, CA. | | |
| Prog. Committee | 2013 IEEE Virtual Control Conference. | | |
| Tech. Adv. Panel | 3^{rd} Annual Smart Grids & Smart Meters Summit: Gateway to a Smart Future. | | |
| , | Park Rotana, Abu Dhabi, UAE. 2013. | | |
| Conf. Chairperson | 2^{nd} Annual Smart Grids & Smart Meters Summit: Gateway to a Smart Future. | | |
| | Park Rotana, Abu Dhabi, UAE. 2012. | | |
| Speaker Selection | 2009 6th MIT Pan-Arab Conference: Global Energy Challenges & Opportuni- | | |
| Chairperson | ties. | | |
| Organizer | 2006 iPROMS Reconfigurability Workshop | | |

7.2.10 Workshop Organization

| October 2013 | 5th MIT-MI Joint Workshop on the Reliability of Power System Operation & Control in the Presence of Increasing Penetration of Variable Energy Resources. Abu Dhabi. UAE. |
|----------------|--|
| February 2013 | 4th MIT-MI Joint Workshop on the Reliability of Power System Operation & Control in the Presence of Increasing Penetration of Variable Energy Resources. Abu Dhabi. UAE. |
| December 2012 | 2nd MHI-MI Workshop on Electric Vehicle Adoption Feasibility in Abu Dhabi. Abu Dhabi. UAE. |
| November 2012 | 3rd MIT-MI Joint Workshop on the Reliability of Power System Operation & Control in the Presence of Increasing Penetration of Variable Energy Resources. Abu Dhabi. UAE. |
| September 2012 | 1st MHI-MI Workshop on Electric Vehicle Adoption Feasibility in Abu Dhabi. Abu Dhabi. UAE. |

| er s | |
|--------------|--|
| May 2012 | 2nd MIT-MI Joint Workshop on the Reliability of Power System Operation |
| | & Control in the Presence of Increasing Penetration of Variable Energy Re- |
| | sources. Abu Dhabi. UAE. |
| January 2012 | 1st MIT-MI Joint Workshop on the Reliability of Power System Operation |
| | &Control in the Presence of Increasing Penetration of Variable Energy Re- |
| | sources. Abu Dhabi. UAE. |

8 Professional References

The following professional references support the entirety of the LIINES research program and my professional experiences over the course of my career. Any may be contacted. They are presented in alphabetical order.

| Reference Name | Title | Contact Information | Professional Expertise |
|--------------------|---|--|----------------------------------|
| Massoud Amin | Professor of Electrical and Computer Engineering at U. of Minnesota Director of the Technological Leadership Institute Chairman of the IEEE Smart Grid Initiative | amin@umn.edu +1 (612) 624.5747 290 McNamara Alum. Ctr. 200 Oak St. Southeast Minneapolis, MN 55455 | Smart Power Grids |
| Olivier de Weck | ■ MIT Professor of Aeronautics and Astronautics and Engineering Systems ■ Co-Director for Center for Complex Engineering Systems at KACST and MIT | deweck@mit.edu +1 (617) 253-0255 77 Massachusetts Ave. Building E40-261D Cambridge, MA 02139 | Engineering Systems |
| John Kassakian | MIT Professor of Electrical Engineering and Computer Science Former Member of the Board of Directors at ISO New England | jgk@mitedu +1 (617) 253-3448 77 Massachusetts Avenue Room 10-172 Cambridge, MA 02139 | Power Systems & Electronics |
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| Nam Suh | ■ Former President of KAIST ■ Former Department Head of MIT Mechanical Engineering ■ Ralph E & Eloise F Cross Professor Emeritus of Mechanical Engineering | npsuh@mit.edu +1 (617) 253-2225 77 Massachusetts Ave. Room 35-235 Cambridge MA 02139 | Engineering Design of Systems |

8. Professional References

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